PMR Request for Quarterly, Semi-Annual and Annual Payment Schedule Calculation

1. Issue

In the Tririga system, if a lease is created with non-monthly payment schedules such as quarterly, semi-annual or annual payments, the system will still run NPV calculation and monthly interest expense calculation based on monthly compounding interest, rather than use the corresponding quarterly, semi-annual or annual compounding interest. As a result, the NPV value will be misstated and subsequent monthly interest expense calculation will not be accurate either.

2. Expected Result

For leases with non-monthly payment streams, NPV is expected to use the interest rate based on payment frequency (e.g., if a lease has 4 annual payments across the 4-year lease term with an annual IBR of 12%, then for annual interest payment frequency the system logic should use 12% per year instead of 1% per month based on 48 payments for NPV calculation; if payment frequency is quarterly on a 4-year lease term, then the NPV calculation should use a quarterly interest of 3% with 16 payments instead of 1% per month with 48 payments).

3. Environment Details

- Application: Business Application - IBM TRIRIGA.
- Application **Version: 10.5.3.5**
- Platform Version: 3.6.0.2
- Priority: Severity 3
- Is user impacted? Yes
- Is Production Environment is impacted? Yes

4. Steps to Replicate

Quarterly Payment:

1) Create a lease with commencement date of 4/1/2019 and expiration date of 1/31/2022. Payment in advance.
   Set up a quarterly payment stream at 85,540/per quarter due on the first day of each quarter with no escalation. Summary type is rent, included in amortization is checked.
2) Submit for accounting review.
3) In accounting tab, set lease type to building and land. IBR is 9.7227% with an economic life of asset of 40 years.
4) Choose No to all treatment or classification questions.
5) Calculate NPV, calculate lease classification and Generate Accounting Schedule

Annual Payment:

1) Create a lease with commencement date of 4/1/2019 and expiration date of 3/31/2022. Payment in advance.

2) Set up an annual payment stream at 55,000/per year with no escalation. Summary type is rent, included in amortization is checked.
3) Submit for accounting review.
4) In accounting tab, set lease type to building and land. IBR is 9.57% with an economic life of asset of 40 years.
5) Choose No to all treatment or classification questions.
6) Calculate NPV, calculate lease classification and Generate Accounting Schedule

5. Results

In both tests, the system is not calculating NPV and subsequent monthly interest expense as expected. Please see the provided spreadsheet for Tririga calculation details as well as the expected values.